

	Type	L #	Hits	Search Text	DBs	Time Stamp
1	BRS	L1	92546	(voice or sound or audio or audible or vocal or vocally) near5 (instruction or instructing or command or commanding or inform or informing or informed or information)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB; USOCR	2003/04/01 20:19
2	BRS	L2	129076	(instruction or instructing or command) near5 (operating or operation)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB; USOCR	2003/04/01 20:20
3	BRS	L3	11992	2 near5 (customer or user or client or operator)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB; USOCR	2003/04/01 20:20
4	BRS	L4	361	1 near10 3	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB; USOCR	2003/04/01 20:20
5	BRS	L5	64034	(voice or sound or audio or audible or vocal or vocally) near5 (customer or user or client or operator)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB; USOCR	2003/04/01 20:21
6	BRS	L6	328	2 near5 5	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB; USOCR	2003/04/01 20:21
7	BRS	L7	18	6 near5 (atm or teller or banking or machine or transaction or terminal) <i>Scanned Ti, Ab, Kwic all</i>	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB; USOCR	2003/04/01 20:22
8	BRS	L8	16	4 and 7 <i>Scanned Ti, Ab, Kwic all</i>	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB; USOCR	2003/04/01 20:31

	Type	L #	Hits	Search Text	DBs	Time Stamp
9	BRS	L9	5070	1 near5 (atm or teller or banking or machine or transaction or terminal or vend or vending or vended or dispense or dispensing or dispenser)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB; USOCR	2003/04/01 20:33
10	BRS	L10	2035	(voice or sound or audio or audible or vocal or vocally) near5 2	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB; USOCR	2003/04/01 20:33
11	BRS	L11	111	10 near5 (atm or teller or banking or machine or transaction or terminal)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB; USOCR	2003/04/01 20:33
12	BRS	L12	94	9 and 11 <i>Scanned Ti, Ab, Kwic all</i>	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB; USOCR	2003/04/01 20:34

	Document ID	Issue Date	Inventor	Current OR	Current XRef	Pages
1	WO 200028495 A	20000518	BLACK, J S et al.			22
2	JP 11308309 A	19991105				6
3	EP 61839 A	19821006	KITAMURA, K			14
4	US 5991726 A	19991123	Immarco, Peter et al.	704/270	704/274; 704/275	10
5	US 5748485 A	19980505	Christiansen, Lars K. et al.	700/234	700/236; 705/16	12
6	US H001708 H	19980203	Davidson, Leonard et al.	700/240	235/381	40
7	US 5230023 A	19930720	Nakano, Fumio	381/110	379/354; 379/88.02; 704/275	9
8	US 5036472 A	19910730	BuckleY, Stephen P. et al.	700/233	347/110; 700/234; 700/235	19
9	US 4462080 A	19840724	Johnstone, Richard et al.	704/200	381/110	12

17 results

	Document ID	Issue Date	Inventor	Current OR	Current XRef	Pages
1	WO 200028495 A	20000518	BLACK, J S et al.			22
2	JP 11308309 A	19991105				6
3	EP 61839 A	19821006	KITAMURA, K			14
4	US 5991726 A	19991123	Immarco, Peter et al.	704/270	704/274; 704/275	10
5	US 5748485 A	19980505	Christiansen, Lars K. et al.	700/234	700/236; 705/16	12
6	US H001708 H	19980203	Davidson, Leonard et al.	700/240	235/381	40
7	US 5230023 A	19930720	Nakano, Fumio	381/110	379/354; 379/88.02; 704/275	9
8	US 5036472 A	19910730	Buckley, Stephen P. et al.	700/233	347/110; 700/234; 700/235	19
9	US 4462080 A	19840724	Johnstone, Richard et al.	704/200	381/110	12

18 results

	Document ID	Issue Date	Inventor	Current OR	Current XRef	Pages
1	WO 200028495 A	20000518	BLACK, J S et al.			22
2	JP 11308309 A	19991105				6
3	EP 61839 A	19821006	KITAMURA, K			14
4	US 6061666 A	20000509	Do, Cuong et al.	705/43	235/379	14
5	US 5991726 A	19991123	Immarco, Peter et al.	704/270	704/274; 704/275	10
6	US 5878395 A	19990302	Bennett, James D.	704/275	704/272	17
7	US 5748485 A	19980505	Christiansen, Lars K. et al.	700/234	700/236; 705/16	12
8	US H001708 H	19980203	Davidson, Leonard et al.	700/240	235/381	40
9	US 5230023 A	19930720	Nakano, Fumio	381/110	379/354; 379/88.02; 704/275	9

L12 results

	Document ID	Issue Date	Inventor	Current OR	Current XRef	Pages
10	US 5036472 A	19910730	Buckley, Stephen P. et al.	700/233	347/110; 700/234; 700/235	19
11	US 4462080 A	19840724	Johnstone, Richard et al.	704/200	381/110	12

L12 results

DERWENT-ACC-NO: 1982-N3569E

DERWENT-WEEK: 198241

4 ~ COPYRIGHT 1999 DERWENT INFORMATION LTD 14 ~

TITLE: Control panel for NC machine tool - includes audio output system to provide spoken instructions to operator for machine operation

INVENTOR-NAME: KITAMURA, K

PRIORITY-DATA: 1981JP-0037480 (March 16, 1981)

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
EP 61839 A	October 6, 1982	E	012	N/A
KR 8901440 B	May 3, 1989	N/A	000	N/A

INT-CL_(IPC): B23Q015/00; G05B019/40

ABSTRACTED-PUB-NO: EP 61839A

BASIC-ABSTRACT: An audio memory (41) stores various programs, e.g. starting-up procedure, operating procedure, warnings of possible problems. An input/output controller (42) controls access to the memory to select the required program material in accordance with a code signal input from the panel (3) by actuation of an appropriate key switch (32). A CRT display (31) allows the contents of the programs to be viewed during machining.

The audio output allows use of the machine by an inexperienced operator and gives audible warnings of such problems as, shortage of lubricating oil, insufficient air pressure, blown fuses, work table overrunning, machine overloaded, incorrect tool selection, and so on. The machine can be adapted for use in another country merely by supplying the memory device with audio programs in the appropriate language.

DERWENT-ACC-NO: 2000-430846

DERWENT-WEEK: 200151

4 ~ COPYRIGHT 1999 DERWENT INFORMATION LTD 14 ~

TITLE: Automated teller machine for financial institution, has speech generator and loud speaker to produce audible terminal operating instructions for user, and user panel permits user to interact with the terminal

INVENTOR-NAME: BLACK, J S; NICOLL, K A ; SAVAGE, J G

PRIORITY-DATA: 1998GB-0024762 (November 11, 1998)

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
EP 1129440 A1	September 5, 2001	E	000	G07F 019/00
WO 200028495 A1	May 18, 2000	E	022	G07F 019/00

INT-CL (IPC): G07F019/00

ABSTRACTED-PUB-NO: WO 200028495A

BASIC-ABSTRACT: NOVELTY - Speech generator and a loud speaker (30) produce audible terminal operating instructions for the user . User panel (12) permits the user to interact with the terminal (10) in response to the instructions. Processor processes the user interactions with the terminal.

DETAILED DESCRIPTION - An INDEPENDENT CLAIM is also included for the method of operating a self service terminal.

USE - For financial institutions.

ADVANTAGE - Facilitates communication with the user and eliminates background noise. Eliminates the need for a keypad, display screen and keys and thereby saves cost. Provides greater flexibility in the design and configuration of the terminal.

DESCRIPTION OF DRAWING(S) - The figure shows a diagrammatic representation of the self service terminal.

Audible terminal 10

User panel 12

Loud speaker 30

US-PAT-NO: 6061666

DOCUMENT-IDENTIFIER: US 6061666 A

TITLE: Automatic bank teller machine for the blind and visually impaired

DATE-ISSUED: May 9, 2000

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Do; Cuong	Woodland Hills	CA	N/A	N/A
Merman; Michael	Santa Monica	CA	N/A	N/A

US-CL-CURRENT: 705/43; 235/379

ABSTRACT: An automatic bank teller machine (ATM) that uses a combination of simple visual cues, large-type visual displays, audio, and a touch-sensitive display screen to facilitate use of the ATM by the blind and visually impaired, while still being useful for the sighted. In particular, the ATM uses a touch-sensitive display screen that has a fixed, easy to locate touch scanning zone. The display screen operates by contacting the screen, with a fingertip, for example, and slidingly moving to a location on the touch scanning zone corresponding to an item to be input, such as one of the numbers 0 to 9, for example.

39 Claims, 8 Drawing figures

Exemplary Claim Number: 1

Number of Drawing Sheets: 8

----- KWIC -----

Brief Summary Text - BSTX: Generally, the ATM according to the present invention provides a plurality of audible cues, including verbal instructions, to guide a blind or visually impaired customer through the steps of the operating the ATM. These audible cues may be supplemented by providing a plurality of coarse visual cues to further guide the use of the ATM. The term "coarse" here refers to visual cues, such as light-emitting indicators associated with respective parts of the ATM (the cash dispenser slot, the bank card reader, the transaction record printer, etc.) or large-type text displays, which are relatively easy to perceive and which are well-suited for visually impaired persons with diminished visual acuity.

Claims Text - CLTX: (b) selectively actuating audible sounds and verbal operating instructions during the operation of the ATM in response to the input signal, where the audible sounds and verbal operating instructions direct the visually impaired person in using the at least one ATM system component; and

Claims Text - CLTX: (c) selectively illuminating a light source disposed adjacent to the at least one ATM system component, in coordination with providing the audible sounds and verbal operating instructions and in response to the input signal, wherein the light source is selectively illuminated in a sequence corresponding to the steps of the transaction and provides a coarse visual signal that aids the visually impaired person in locating the at least one ATM system component used in performing the transaction.

Claims Text - CLTX: 30. A method of providing assistance in the operation of an automated teller machine as recited in claim 28, wherein selectively actuating audible sounds and verbal operating instructions comprises emitting sound from a speaker.

Claims Text - CLTX: 31. A method of providing assistance in the operation of an automated teller machine as recited in claim 28, wherein selectively actuating audible sounds and verbal operating instructions comprises emitting sound from a speaker within a hand set.

US-PAT-NO: 5878395

DOCUMENT-IDENTIFIER: US 5878395 A

TITLE: Code reading terminal with integrated vehicular head-up display capability

DATE-ISSUED: March 2, 1999

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Bennett; James D.	Austin	TX	N/A	N/A

US-CL-CURRENT: 704/275; 704/272

ABSTRACT: A portable computer terminal is disclosed which may operate in a hand-held mode and while docked within a vehicle. The terminal interacts with an illumination means therein which can be used for bar code reading and, while docked, for providing illumination for a head up display on the vehicle's windshield. Textual messages undergo text to voice conversion as well as head up display. Moreover, to provide full hands-off operation, voice recognition of predefined sets of commands is incorporated within the terminal . In another embodiment, the illumination means is placed in a housing separate from the terminal. A wireless link between the illumination means and the terminal provide for communicating text and graphics for head up display.

21 Claims, 10 Drawing figures

Exemplary Claim Number: 1

Number of Drawing Sheets: 10

----- KWIC -----

Abstract Text - ABTX: A portable computer terminal is disclosed which may operate in a hand-held mode and while docked within a vehicle. The terminal interacts with an illumination means therein which can be used for bar code reading and, while docked, for providing illumination for a head up display on the vehicle's windshield. Textual messages undergo text to voice conversion as well as head up display. Moreover, to provide full hands-off operation, voice recognition of predefined sets of commands is incorporated within the terminal . In another embodiment, the illumination means is placed in a housing separate from the terminal. A wireless link between the illumination means and the terminal provide for communicating text and graphics for head up display.

Brief Summary Text - BSTX: The terminal communicates textual information via the screen and, when inserted within the docking fixture, via the illuminator assembly. Some embodiments of the terminal further contain text to voice conversion circuitry. With such circuitry, a terminal also communicates textual information in an audible form to a driver.

Brief Summary Text - BSTX: Another aspect of the present invention can be found in the application of speech recognition circuitry within the terminal which accepts voice command input, permitting hands off operation of the terminal .

Detailed Description Text - DETX: FIG. 1 is a diagram illustrating a perspective view from a

driver's seat within a vehicle, showing an installation of a wireless, code reading terminal built in accordance with the present invention. A terminal 11 operates when inserted into a dock 13 on a dash board 15 of a vehicle, and when hand-held and removed from the dock 13 (not shown). When docked, the terminal 11 delivers information to the driver via: 1) a screen 12; 2) head up display; and 3) voice output. When removed from the dock 13, the terminal 11 uses all information delivery options except the head up display. Additionally, the terminal 11 is configured with voice recognition capability to provide for verbal command input.

Detailed Description Text - DETX: The terminal 11 is also configured for text to voice conversion which allows the terminal 11 to communicate textual information and messages to the driver in an audible form.

Detailed Description Text - DETX: As with the embodiment illustrated in FIG. 1, the terminal 303 communicates textual information to a driver via: 1) text to voice conversion; 2) head up display (when docked); and 3) LCD display on a screen 311. Voice recognition of commands is also provided. In addition, the terminal 303 may include an illuminator assembly dedicated to code reading.

Claims Text - CLTX: 5. The terminal of claim 3 wherein said terminal communicates textual information via said screen, said text to voice conversion circuitry, and, when inserted within the docking fixture, via said illuminator assembly.

Claims Text - CLTX: 13. The terminal of claim 7 wherein said terminal communicates textual information via said screen, said text to voice conversion circuitry, and, when inserted within the docking fixture, via said illuminator assembly.

Claims Text - CLTX: wherein said terminal communicates textual information via said screen, said text to voice conversion circuitry, and, when inserted within the docking fixture, via said illuminator assembly.

US-PAT-NO: 5036472

DOCUMENT-IDENTIFIER: US 5036472 A

TITLE: Computer controlled machine for vending personalized products or the like

DATE-ISSUED: July 30, 1991

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Buckley; Stephen P.	Kansas City	MO	N/A	N/A
Robinson; Richard A.	Parkville	MO	N/A	N/A
Hurlburt; John H.	Lee's Summit	MO	N/A	N/A
Pfahl; Kurt A.	Leawood	MO	N/A	N/A
Doerflinger; Arthur E.	Kansas City	MO	N/A	N/A

US-CL-CURRENT: 700/233,347/110 ,700/234 ,700/235

ABSTRACT: A machine for vending greeting cards or other personalized or customized products includes audio and video presentations of available products and options available to a customer, provisions for payment and apparatus for automatic delivery of products. Base products such as preprinted forms are stored for selective transfer by a robot device to modifying apparatus such as a printer, modified products being delivered to a delivery receptacle, all operations being under computer control and being changeable as desired for adding or substituting new forms of products.

28 Claims, 17 Drawing figures

Exemplary Claim Number: 1

Number of Drawing Sheets: 8

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CLPR: 17. A machine as defined in claim 16, further including audio means for providing operating instructions and indications to a customer .

US-PAT-NO: H001708

DOCUMENT-IDENTIFIER: US H001708 H

TITLE: System for creating and producing custom card products

DATE-ISSUED: February 3, 1998

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Davidson; Leonard	Los Angeles	CA	N/A	N/A
Russell; H. Matthew	Glendale	CA	N/A	N/A
Russell; Michael S.	Glendale	CA	N/A	N/A
Allred; Scott K.	Glendale	CA	N/A	N/A

US-CL-CURRENT: 700/240,235/381

ABSTRACT: A method of and apparatus for creating and vending printed card products such as greeting cards is disclosed, whereby a customer can select a card product for a desired application and customize or personalize certain portions of the selected card product. A terminal area or kiosk is provided at which the customer selects from a monitor screen display one of a number of different selection criterion for which he/she wants to obtain a card product. There may be multiple levels of selection criteria. Upon entry of the selection via, e.g., a transparent touch-sensitive plate on the monitor screen, one or more pre-stored groups of card product design formats pertaining to the selected selection criterion are determined, and the customer is prompted to select a particular card format to customize. The card product designs may include separate graphics, text and spaces for insertion of customized user messages, and these elements may be stored in a compressed format. Further inquiries via the monitor screen elicit custom messages to be reproduced at designated locations in the format of the chosen card product. The customized card product is then created by, e.g., a multi-color ink plotter that is fed with specially prepared sheets of card stock, and vended to the customer.

61 Claims, 35 Drawing figures

Exemplary Claim Number: 30

Number of Drawing Sheets: 28

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CLPR: 43. A machine as defined in claim 42, further including audio means for providing operating instructions and indications to a customer .

US-PAT-NO: 5748485

DOCUMENT-IDENTIFIER: US 5748485 A

TITLE: Software vending machine having CD-ROM storage

DATE-ISSUED: May 5, 1998

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Christiansen; Lars K.	Bluffdale	UT	N/A	N/A
Roberts; Mark H.	Midvale	UT	N/A	N/A
Griffiths; David J.	Spanish Fork	UT	N/A	N/A
Adamson; Brent R.	Wendover	UT	N/A	N/A

US-CL-CURRENT: 700/234; 700/236 ; 705/16

ABSTRACT: A vending machine for vending computer software comprises, a bill acceptor for receiving money, an optical disk for storing a selection of programs to be vended, a hard disk drive for storing operating software, accounting information, and updates to the software vended, a diskette dispenser, and a disk drive all under control of a processor. The invention further comprises a device for indicating a program selection to the processor such that the processor may direct the writing of a customer-selected program to a diskette after money has been received.

23 Claims, 6 Drawing figures

Exemplary Claim Number: 5

Number of Drawing Sheets: 4

----- KWIC -----

Brief Summary Text - BSTX: U. S. Pat. No. 4,674,055, issued on Jun. 16, 1987, also to Hirokazu Ogaki, describes a system in which a number of remote software vending machines resembling those of U.S. Pat. No. 4,672,554 are connected to a central host processor. The central host is responsible for collecting accounting information from each remote vending machine, and for updating the hard drives of the remote machines with new software to be vended. Neither Ogaki patent discloses the use of an optical read-only disk for program storage or audible instructions for machine operation, nor does either Ogaki patent disclose the automatic verification of credit cards. Further, Ogaki does not disclose the use of audible messages to instruct a customer in machine operation, or to inform customers of the characteristics of programs available for vending.

Claims Text - CLTX: a sound card and loudspeaker device for instructing users in machine operation ;

Claims Text - CLTX: 20. The software vending machine of claim 19 further comprising a sound card and loudspeaker device for instructing users in machine operation and for giving information about the software.

US-PAT-NO: 5230023

DOCUMENT-IDENTIFIER: US 5230023 A

TITLE: Method and system for controlling an external machine by a voice command

DATE-ISSUED: July 20, 1993

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Nakano; Fumio	Tokyo	N/A	N/A	JP

US-CL-CURRENT: 381/110; 379/354 ; 379/88.02 ; 704/275

ABSTRACT: In a method for controlling an external machine by a voice command, a voice pattern which is extracted from a voice supplied through a microphone is compared with reference voice patterns to pick up one of them which corresponds to a certain voice command to control an external machine, and a similarity between the voice pattern and the reference voice pattern is calculated. Then, a control signal is supplied to the external machine after a waiting time passes. The waiting time is determined dependent on the similarity such that the waiting time is relatively long when the similarity is low and is determined relatively short when the similarity is high, so that an operator has a sufficient time to judge whether the voice command is the desired one.

11 Claims, 5 Drawing figures

Exemplary Claim Number: 1

Number of Drawing Sheets: 5

----- KWIC -----

TITLE - TI: Method and system for controlling an external machine by a voice command

Abstract Text - ABTX: In a method for controlling an external machine by a voice command, a voice pattern which is extracted from a voice supplied through a microphone is compared with reference voice patterns to pick up one of them which corresponds to a certain voice command to control an external machine, and a similarity between the voice pattern and the reference voice pattern is calculated. Then, a control signal is supplied to the external machine after a waiting time passes. The waiting time is determined dependent on the similarity such that the waiting time is relatively long when the similarity is low and is determined relatively short when the similarity is high, so that an operator has a sufficient time to judge whether the voice command is the desired one.

Brief Summary Text - BSTX: This invention relates to a method and a system for controlling an external machine by a voice command, and more particularly to, a method and a system for controlling an external machine by a voice command in which a voice command is analyzed to control an external machine by comparing the voice analyzed patterns with reference voice patterns.

Brief Summary Text - BSTX: Control systems of external machines by a voice command have

been developed in recent years. In a first conventional control system of an external machine by a voice command, a voice command is supplied via a microphone to the control system to control an external machine, and an operator of the control system is informed visually or aurally that the voice command is accepted. If the operator confirms that the accepted voice command is a desired command, the operator supplies a confirmation signal to the control system to supply the machine with a command signal to control, so that the machine is controlled to operate in accordance with the voice command. If the operator recognizes that the accepted voice command is not the desired command, the operator may not supply a confirmation signal, so that the machine may not be controlled to operate by the voice command.

Brief Summary Text - BSTX: In a second conventional control system of an external machine by a voice command, a command signal is supplied to an external machine after a predetermined waiting time passes upon the acceptance of the voice command, so that the machine is controlled to operate automatically unless an operator of the control system supplies a halt command to the system in the predetermined waiting time.

Brief Summary Text - BSTX: According to the first and second conventional control systems of external machines by a voice command, however, there are disadvantages as described below.

Brief Summary Text - BSTX: In the first conventional control system of an external machine by a voice command, it is troublesome for the operator to supply a confirmation signal every time the voice command is accepted, especially when the voice command is a desired one.

Brief Summary Text - BSTX: In the second conventional control system of an external machine by a voice command, after the operator judges whether the accepted voice command is a desired one or not, the operator must supply a halt command to the system in the predetermined waiting time, when the accepted voice command is not the desired one. Therefore, if the waiting time is set to be long, operation time becomes long. On the other hand, if the waiting time is set to be short, the operator is required to supply the halt command quickly.

Brief Summary Text - BSTX: Accordingly, it is an object of the invention to provide a method and a system for controlling an external machine by a voice command in which the operator is released from a troublesome operation of supplying a confirmation signal when the voice command is a desired one.

Brief Summary Text - BSTX: It is a further object of the invention to provide a method and a system for controlling an external machine by a voice command in which the operator has a sufficient time to supply a halt command to the system when the accepted voice command is not a desired one.

Brief Summary Text - BSTX: According to a first feature of the invention, a method for controlling an external machine by a voice command, comprises:

Brief Summary Text - BSTX: According to a second feature of the invention, a system for controlling an external machine by a voice command, comprises:

Brief Summary Text - BSTX: means for storing reference voice patterns which correspond to control commands of an external machine to be controlled;

Drawing Description Text - DRTX: FIG. 1 is a block diagram showing a system for controlling an external machine by a voice command in a preferred embodiment according to the invention;

Drawing Description Text - DRTX: FIG. 2 is a block diagram showing a control unit of the control system of an external machine by a voice command in FIG. 1;

Drawing Description Text - DRTX: FIG. 3 is a flow chart explaining first operation of the control system of an external machine by a voice command in the preferred embodiment according to the invention; and

Drawing Description Text - DRTX: FIGS. 4A and 4B are flow charts explaining second operation of the control system of an external machine by a voice command in the preferred embodiment according to the invention.

Detailed Description Text - DETX: FIG. 1 shows a block diagram of a system for controlling an external machine by a voice command in a preferred embodiment. The control system comprises a microphone 1 which detects a voice and converts the voice into an electric signal, a voice analyzing unit 2 which extracts a voice pattern (input voice pattern) from the voice, a matching unit 3 which checks the matching between the input voice pattern and a reference voice pattern to pick up a reference voice pattern which corresponds to the input voice pattern, a reference voice pattern memory 4 which stores reference voice patterns corresponding to voice commands, a control unit 5 which judges a degree of similarity between the input voice pattern and the reference voice pattern and controls an external machine 6 such as a telephone set, a facsimile machine, etc. to be controlled in accordance with the degree of the similarity, and a halt signal key 7 for generating a halt signal to halt the control of the external machine 6.

Detailed Description Text - DETX: In the step 104, the result of the judgement in the step 103, along with the corresponding voice command and the called party and the telephone number thereof, are informed to the operator visually or aurally, and then a step 105 is carried out, where it is checked whether a halt command is supplied. If an input of the halt command is recognized in the step 105, the operation is restarted from the step 100. And if an input of the halt command is not recognized, then it is checked whether a first predetermined waiting time which is relatively short, that is 3 seconds for instance, passes or not in a step 106. If not, the operation is repeated in a loop comprising the steps 105 and 106 until the first predetermined waiting time passes. If the first predetermined waiting time passes, the control signal is supplied to the external machine in a step 107, so that the machine is controlled in accordance with the voice command.

Detailed Description Text - DETX: In the step 205, the result of the judgement in the step 203 is informed to the operator visually or aurally, and then a step 206 is carried out, where it is checked whether a halt command is supplied. If an input of the halt command is recognized in the step 206, the operation is restarted from the step 202. And if not, then it is checked whether the predetermined time which is set in the step 201, that is 5 seconds for instance, passes in a step 207. If not so, the operation is repeated in a loop comprising the steps 206 and 207 until the predetermined time passes. If the predetermined time passes, the control signal is supplied to the external machine in a step 208, so that the external machine is controlled in accordance with the voice command .

Claims Text - CLTX: 1. A method for controlling an external machine by a voice command, comprising steps of:

Claims Text - CLTX: 2. A method for controlling an external machine by a voice command, according to claim 1:

Claims Text - CLTX: 3. A method for controlling an external machine by a voice command, according to claim 1:

Claims Text - CLTX: 4. A method for controlling an external machine by a voice command, according to claim 1:

Claims Text - CLTX: 5. A method for controlling an external machine by a voice command, according to claim 1:

Claims Text - CLTX: 6. A method for controlling an external machine by a voice command, according to claim 1:

Claims Text - CLTX: 7. A method for controlling an external machine by a voice command, according to claim 6:

Claims Text - CLTX: 8. A system for controlling an external machine by a voice command, comprising:

Claims Text - CLTX: means for storing reference voice patterns which correspond to control commands of an external machine to be controlled;

Claims Text - CLTX: 9. A system for controlling an external machine by a voice command, according to claim 8:

Claims Text - CLTX: 10. A system for controlling an external machine by a voice command, according to claim 8:

Claims Text - CLTX: 11. A method for controlling an external machine by a voice command, comprising the steps of:

US-PAT-NO: 5991726

DOCUMENT-IDENTIFIER: US 5991726 A

TITLE: Speech recognition devices

DATE-ISSUED: November 23, 1999

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Immarco; Peter	Boca Raton	FL	33433	N/A
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US-CL-CURRENT: 704/270,704/274 ,704/275

ABSTRACT: A voice recognition system which controls industrial equipment or machinery. A proximity detector is attached to automatically adjust microphone sensitivity and to control automatic shutdown when the machine operator is not present. An enhanced barge-in feature uses a data switch that includes an input audio delay storage. The delay storage prevents loss of initial input data by delaying the input until the data switch switches from output to input modes. A variety of audio/video responses are provided to vary output and enhance attention span. Rules based input data handling provides a flexible response to user input.

4 Claims, 3 Drawing figures

Exemplary Claim Number: 1

Number of Drawing Sheets: 3

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BSPR: One important area in which voice recognition systems have been largely ignored is in the area of industrial and manufacturing use. Manufacturing machines such as lathes, milling machines, etc, typically require manual control by an operator. Physical drawbacks to this method of use include the possibility of injury to the operator if an accident should occur when controlling the machine. In addition, manufacturing jobs often require repetitive operations which can lead to other disabilities, such as carpel tunnel syndrome. It would be advantageous to have a system capable of allowing a machine operator to control machinery via voice commands rather than through manual operation .